Full Name – Nickname

Write a program that takes in Strings. If it is a full name, display the nickname, and vice-versa. If it is neither a full name nor a nickname, display "Not found".

The full name and nickname pairs for this problem are given as follows.

Full Name	Nickname
Robert	Dick
William	Bill
James	Jim
John	Jack
Margaret	Peggy
Edward	Ed
Sarah	Sally
Andrew	Andy
Anthony	Tony
Deborah	Debbie

Try to write this program without using `if/elif` checking such as

```
if  x=="Robert":
    print("Dick")
elif x=="William":
    print("Bill")
...
```

Input

The first line is a single integer **N**.

The following **N** lines are Strings.

Output

N lines displaying the paired name with the input name. One for each line.

If the name is not in the table above, display **Not found**.

Example

Input (from keyboard)	Output (on screen)
4 John Jim Don Debbie	Jack James Not found Deborah